

Protect Yourself, Protect Your Patient: Preventing Infections

Vaccination Recommendations

The Advisory Committee on Immunization Practices (ACIP) recommends that:

- Hepatitis B vaccination be administered to adults in settings in which a high proportion of persons are likely to be at risk for HBV infection, this includes health care personnel.
- Hepatitis B vaccination be administered to adults with diabetes mellitus who are aged 19 through 59 years and have not previously received Hepatitis B vaccination.
 - For adults with diabetes mellitus who are aged 60 or greater and have not previously received Hepatitis B vaccination, vaccination may be administered at the discretion of the treating clinician.
- Hepatitis B vaccination be administered to persons beginning hemodialysis.

Occupational health programs should:

- Identify all staff whose work-related activities involve possible exposure to blood or other potentially infectious body fluids in a health-care, laboratory, public safety, or institutional setting (including employees, students, contractors, attending clinicians, emergency medical technicians, paramedics, and volunteers);
- Provide education to staff to encourage vaccination
- Implement active follow-up, with reminders to track completion of the vaccine series among persons receiving vaccination
- Provide appropriate post vaccination testing

Cleaning, disinfection, and Sterilization

Practice standards for cleaning, disinfection and sterilization in healthcare settings are based on Spaulding's classification system.

- Healthcare devices and equipment are designated based on the risk of infection involved with their use. Devices and equipment as classified as:
 - critical,
 - semi-critical
 - non-critical
- These categories define the level of reprocessing (disinfection or sterilization) required for various medical devices.

Cleaning:

- The removal of debris such as dirt, food, feces, blood, saliva and other body secretions.
- Reduces the amount of organic matter that contributes to the proliferation of bacteria and viruses.
- Items requiring ONLY cleaning are:
 - Floors
 - Walls
 - Windows
 - Chairs and other furniture used by individuals who are clothed,
 - Private offices and other non-public, non-patient care areas.
 - Bed curtains should be changed when soiled and with terminal cleaning.

Disinfection:

- Removes most organisms present on surfaces that can cause infection or disease.
- EPA approved product must be used to achieve desired level of disinfection
- Follow manufacturer's recommendations to achieve disinfection and be sure to use:
 - Correct dilution
 - Correct contact time

- Correct temperature
- Three levels of disinfection:
 - High
 - Intermediate
 - Low
- Non –critical Items require intermediate- level or low level disinfection.
 - This includes items in contact only with intact skin.
 - High touch surfaces in patient rooms are considered non-critical but must be cleaned and then disinfected on a regular basis.
 - Examples include: doorknobs, bedrails, IV pump, IV poles, telephones, TV remote, computer keyboard, toilet and light switches.
- Semi- critical items require, at a minimum, high level disinfection.
 - This includes items in contact with non-intact skin or mucous membranes.
 - The cleaning process (or removal of debris) must precede high- level disinfection.

Sterilization:

- Removal of all organisms
- Critical items require sterilization
 - This includes items that enter sterile tissue or the vascular system.
- Steam Sterilization: Autoclave
 - Achieves rapid heating and penetration
 - Temperature must be maintained throughout the steam sterilization process.
 - Items to be sterilized must be clean and free of protein (blood) or other organic material
 - Follow manufacturer’s instructions for use.
 - Keep time and temperature logs
 - Use indicators to monitor effectiveness of the steam sterilization process

Resources:

CDC’s Guidelines for Disinfection and Sterilization in Healthcare Facilities

http://www.cdc.gov/hicpac/Disinfection_Sterilization/17_00Recommendations.html

ACIP Hepatitis B Vaccine Recommendations

<http://www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/hepb.html>

EPA registered disinfectants

www.epa.gov/oppad001/chemregindex.htm

References

<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6050a4.htm> Use of Hepatitis B Vaccination for Adults with Diabetes Mellitus: Recommendations of the Advisory Committee on Immunization Practices (ACIP) December 23, 2011 / 60(50);1709-1711

<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5516a1.htm> A Comprehensive Immunization Strategy to Eliminate Transmission of Hepatitis B Virus Infection in the United States Recommendations of the Advisory Committee on Immunization Practices (ACIP) Part II: Immunization of Adults

CDC. Immunization of Health-Care Personnel: Recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR, 2011; 60(RR-7).

CDC. CDC Guidance for Evaluating Health-Care Personnel for Hepatitis B Virus Protection and for Administering Postexposure Management, MMWR, 2013; 62(10):1–19.

IAC. Pre-exposure Management for Healthcare Personnel with a Documented Hepatitis B Vaccine Series Who Have Not Had Post-vaccination Serologic Testing